

9.0 OPEN SPACE



MIDDLETOWN PLAN OF DEVELOPMENT

9.0 OPEN SPACE/GREENWAYS

9.1 Introduction

Middletown's undeveloped land plays a critical role in shaping the city's image, appearance, and attractiveness. Open space parcels represent land that is undeveloped because of legal restrictions placed on the property. These lands are intended to remain undeveloped, thereby helping to preserve the city's rural character and protecting the natural resources on the site. They may be owned by the city, state, or by private conservation organizations, such as the Northern Middlesex County Land Trust, Mattabesek Audubon Society, or the Connecticut Forest and Park Association (see Figure 9.1). Open spaces incorporate undeveloped lands, environmentally sensitive lands, and natural features that protect, promote, and enhance the City's natural diversity and allow residents the opportunity to enjoy passive recreational pursuits.

Middletown residents have been strong proponents of acquiring open space parcels. In 1989 City residents approved a referendum to establish a \$5 million Open Space Trust Fund. Since 1991, over 1,000 acres have been set aside for open space purposes. Recent large properties acquired by the City include Guida Farms (100 acres), Long Hill Estate (106 acres), and the Schwartzkopf property (53 acres) and Daniels (60 acres) properties. Other open space acquisitions, such as the Tynan parcel, have expanded existing protected and recreational areas. The City has spent \$6.37 million dollars, since 1991, to acquire open space land.

This chapter recommends the following goals:

- *Prioritize acquisition of lands identified in the Open Space Plan.*
- *Create a corridor system of interconnected open space areas throughout the city.*
- *Maintain sufficient and carefully selected undeveloped land, including farmland, in order to preserve the city's rural character.*

9.2 Greenways

Greenways are most often associated with trails, including bicycle trails and rails-to-trails systems, or open space corridors. They may be found in small segments within a community, or be part of regionally connected greenspace corridors. Greenways serve as connections between places, and it is important that greenways have distinctive destinations.

Greenways, as part of a comprehensive open space plan, recommend preserving farmland, wildlife habitats, and important natural features and incorporating them into linkages between various types of open space parcels. Greenways may provide greater public access to various types of open space by providing trails and linkages between them.

An important component of greenways is to look at the underlying topographical and natural systems of the area, rather than simply a parcel-by-parcel approach that ignores impacts outside of the property lines. The interrelated nature of highlands, lowlands, wetlands, and settlement patterns need to be considered when planning for greenways.

Planning for greenways also means planning for development. Identifying important natural features and connections between them also shows areas where development can go. For instance, the City recognizes the value of industrial land within the city and the environmental sensitivity of the land within the I-3 special industrial zone. Lands within the I-3 zone not designated as proposed open

space with limited industrial potential should certainly be considered for open space acquisition and a part of the Maromas greenway area.

9.3 1990 Plan of Development

The “Open Space” chapter of the 1990 Plan of Development was adopted in 1993 and resulted in the inclusion of an existing and proposed Open Space Plan developed by the Conservation Commission and the Midstate Regional Planning Agency (Figure 9.2). The Open Space Plan considered natural watercourses, environmentally sensitive areas, agricultural lands, wildlife habitats, existing open space, and prime areas that the City should target when acquiring new lands. The Open Space Plan focused on the following strategies:

- Acquisition of additional open space parcels through purchase, gifts, easements or other strategies
- Education of public open space benefits
- Improvement of maintenance techniques and management strategies
- Coordination of future open space provision with subdivision applications
- Working with all levels of government to meet goals

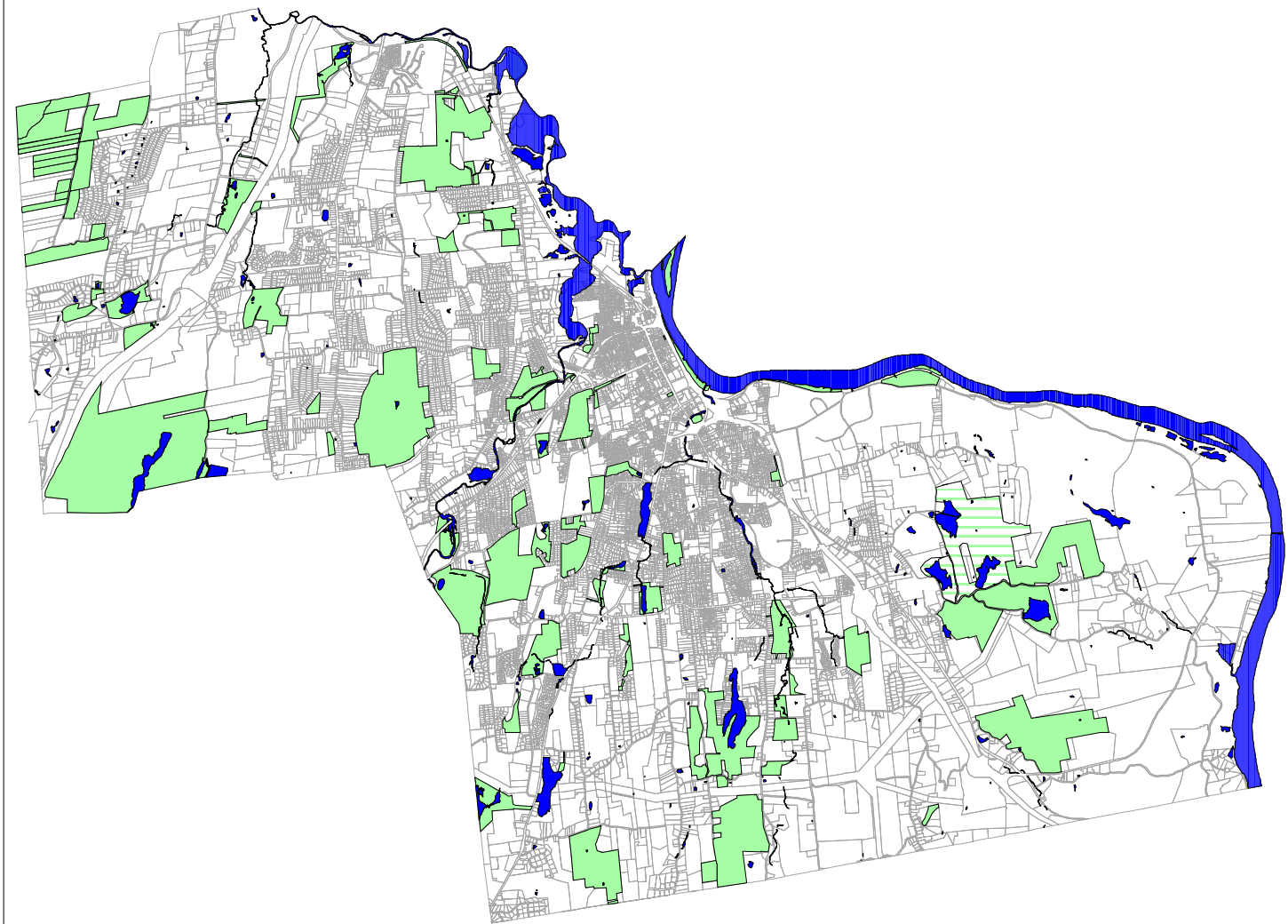
Rather than identifying individual properties with unique features, the open space plan connected the forests, brooks, steep slopes, and wetlands into linear corridors throughout the city. The plan also called for a systematic approach to coordinate open space land purchases, subdivision review, and environmental protection with the Open Space Plan. Figure 9.2 shows the overlap between the 1993 study and recent open space acquisitions.

The amount of land proposed in the Open Space Plan totals 9,441 acres. This is a significant portion of the entire City -- 35%. Not all of this land will be set aside before it is developed, and some land identified in the Open Space Plan has already been subdivided and built upon. However, approximately 4,000 acres have been permanently preserved through acquisitions, easements, or dedications. The following table provides an indication of the amount of dedicated open space lands in Middletown.

**Table 9.1
Committed Open Space Lands**

City of Middletown	1,100	acres
State of Connecticut	1,500	acres
State Parks/Forest	250	
Institutional	1,250	
Land Trusts	580	acres
Homeowners' Assoc.	180	acres
Water District	692	acres
Total	4,052	acres

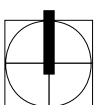
The City figure does not include cemeteries or schools, though it may include institutional property.



MIDDLETOWN PLAN OF DEVELOPMENT
Middletown, CT

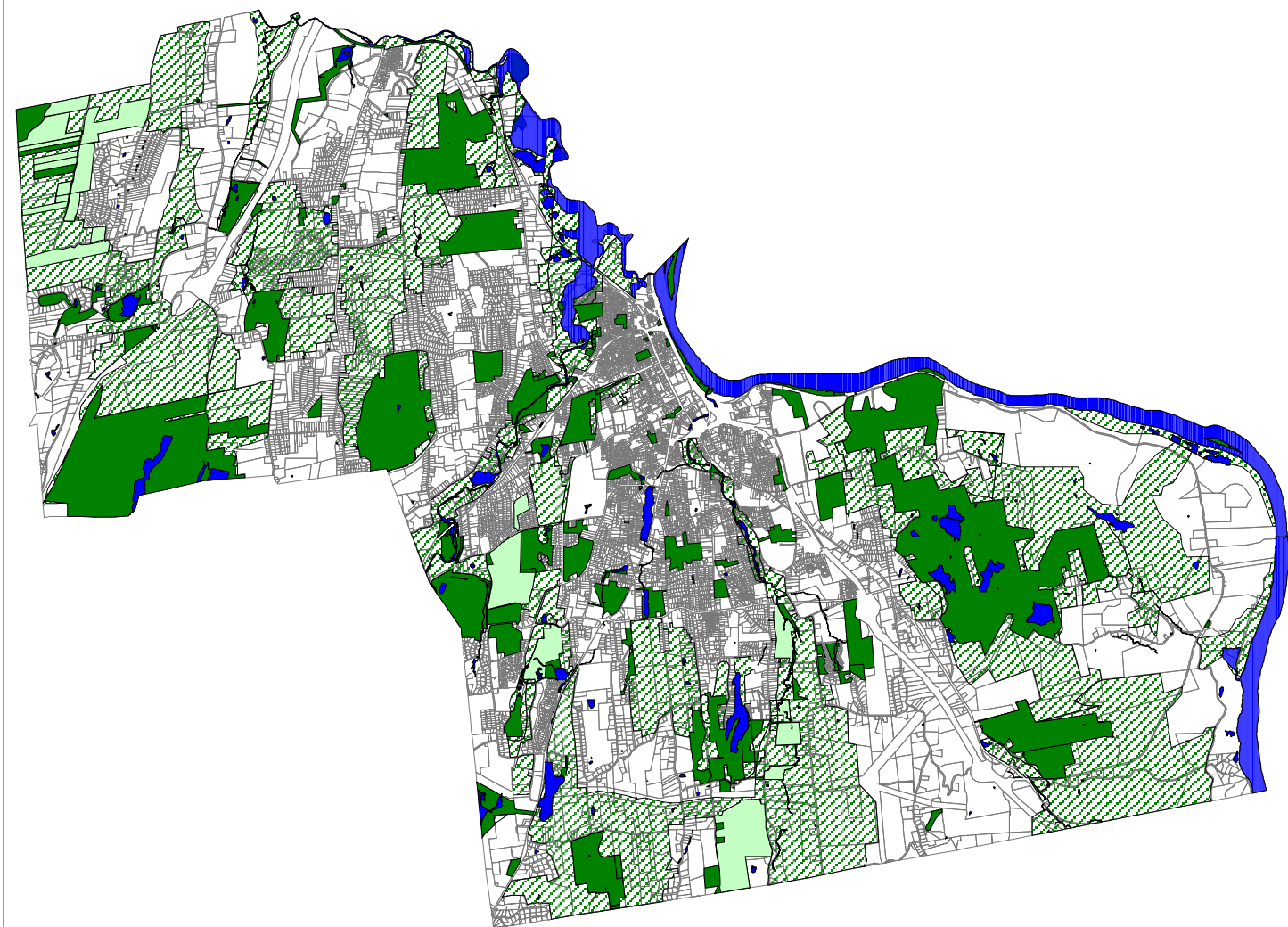
Figure 9.1 Open Space Parcels

- Dedicated Open Space**
- Institutional Open Space**



0 5000 10000 15000 Feet

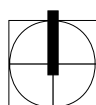
BFJ Buckhurst Fish & Jacquemart, Inc.



MIDDLETOWN PLAN OF DEVELOPMENT
Middletown, CT

Figure 9.2 1993 Open Space Plan
with Recent Acquisitions

- Committed Open Space
- Recent Acquisitions
- Areas Recommended for Future Acquisitions



0 5000 10000 15000 Feet

BFJ Buckhurst Fish & Jacquemart, Inc.

9.4 State of Connecticut Open Space Guidelines

By approving a \$5 million referendum and adopting its Open Space Plan in 1993, Middletown established itself as one of the pioneers in open space planning in Connecticut. It wasn't until 1998 when the State established a committee to study the state's process for acquiring open space lands. Connecticut General Statutes (CGS) Section 12-107b defines open space as:

“any area of land, including forest land, land designated as wetland under Section 22a-30, and not excluding farmland, the preservation or restriction of the use of which would 1) maintain and enhance the conservation of natural or scenic resources, 2) protect natural streams or water supply, 3) promote conservation of soils, wetlands, beaches, or tidal marshes, 4) enhance the value to the public of abutting or neighboring parks, forests, wildlife preserves, nature reservations or sanctuaries or other open spaces, 5) enhance public recreation opportunities, 6) preserve historic sites, or 7) promote orderly urban or suburban development.”

Connecticut originally established a goal of acquiring 10% of the state's land area for open space purposes. This was amended in 1999 by Public Act 99-173, which called for local municipalities to acquire and hold an additional 11%. Public Act 99-235 amended and simplified this by setting a goal of preserving 21% of state lands. The law sets annual targets in order to achieve the 21% goal. The 1998 legislation stipulated the annual numeric goals the state should acquire if it is to move forward towards its 21% figure. For the years 2000 and 2001, the State proposed to acquire 4,000 acres each year, rising to 5,000 acres in 2002. The 21% figure is not anticipated to be met before 2023. To provide assistance to municipalities, the State has made funds available for acquisition purposes and recently created a new fund called the Charter Oak Open Space Trust Account to further open space purchases.

The above definition is particularly important when it concerns open space acquisitions and obtaining state grants for open space lands. CGS Section 7-131d to 7-131k defines the Open Space and Watershed Land Acquisition Grant Program which provides financial assistance to municipalities to acquire open spaces. Criteria include, but are not limited to, the land's value for recreation, forestry, or natural resources, outstanding example of native ecological community, and value for preserving local agricultural heritage. Emphasis will also be given to those areas that comply with local and regional open space or conservation and development plans. Middletown has benefited from these state programs. The city has received almost \$600,000 to acquire five parcels totaling 115 acres. The City has applied for additional grant money and applications are pending. All of these areas were included within the previous open space plan. Because the State Department of Environmental Protection does examine local plans and seeks concurrence between the plan and acquisition, it is important that Middletown's Plan of Conservation and Development identifies all the potential open space needs areas in its proposed land use maps.

9.5 Open Space Plan

The open space map (figure 9.3) has been slightly modified based on input from the Conservation Commission and builds on the work that was adopted in 1993. The new plan continues to support the goals and strategies of the previous plan. In one sense, the Open Space plan seeks to support the natural environment and to provide meaningful linkages between dedicated parcels to create open space corridors that have high recreational and environmental value. For too long, open space areas were considered “vacant” or having little value since they did not provide much in the way of taxes to the local community. However, as communities grow and evolve, the importance and benefits of open space land are becoming increasingly evident.

In large measure, the Open Space Plan seeks to promote a new framework for future development, one which emphasizes principles of land conservation through sensitive design. Rather than accept the commonplace in land development, where the land is consumed by spreading out across its length and breadth, this Open Space Plan asserts that conservation- and design-driven development should become the dominant design type. Development regulations should mandate design principles espoused by planning literature.¹¹ By doing so, balance can be achieved among the urban, suburban, and rural environments, balance which is vital to maintaining the variety in landform that defines Middletown and shapes its character.

Community character

Open space provides buffers between developed and undeveloped land and helps to define the edges of cities and neighborhoods, and to channel future growth. The open space corridor along Route 66 creates an effective separation between Middletown and Middlefield. Contrast that stretch of road with Newfield Street at the Middletown/Cromwell line where the two municipalities merge. Similarly, individual neighborhoods, such as Wesleyan Hills, are separated from adjacent residential areas by open space parcels. Respondents to the 1999 survey indicated that they enjoy the city's variety of urban and rural mix. Open space preserves the rural element and sustains the existing mix that residents value. Open spaces break up the monotonous adverse visual impacts of sprawl. Rather than simply being "vacant" land, open space is important to identity and provides visual separation to distinguish different areas of the city.

Open space also protects viewsheds and vistas that add to the community character. Viewsheds are particularly sensitive where the scenic corridor may be affected by land use changes that are highly visible. Open space areas that preserve the banks and riverfront of the Connecticut River and steep slopes, for example, should be encouraged. Ridgelines represent another example of a prominent landscape that is highly susceptible to alterations, which can negatively impact the scenic qualities of the city. As discussed previously, traprock ridges represent a local geologic characteristic that should be preserved through open space funding. Valley floors, such as through which the Sumner Brook flows, often present vistas which recall Middletown's agrarian heritage. Such images offer visual relief to the urban and suburban development that surrounds them and add a measure of the bucolic to soften the city's hard edges. Continued efforts should be made to preserve more open space in these areas. Historic estates, such as the Wadsworth mansion, should also be analyzed as to how land use changes would impact the historic views of the area.

Farmland

Farmland occupies a unique place in the open space dialogue. Farms represent a historic tie to the land, continuing and preserving the rural qualities that residents like to see. However, market realities have put many farms out of business and new housing now occupies former farms.

Many people view retaining farmland as a way to continue the historic ties that Middletown has with the agricultural community and to prevent suburban sprawl from taking over the countryside. The State of Connecticut passed Public Act 490 to provide a tax incentive to farmers. Many acres within the Sumner Brook watershed have been set aside as open space by farmers who have taken advantage of this tax incentive. The State has also provided \$500,000 in grant money to farmers over the past two years to enable them to continue to farm. Connecticut has other programs that purchase the

¹¹ See, for example, Randall Arendt's *Rural by Design: Maintaining Small Town Character*, American Planning Association, 1994.

development rights from farmers, allowing the land to be cultivated, but preventing the land from being converted into residential subdivisions. These programs are all in addition to other open space grants, but the state's resources in all such programs are limited, and the demands on them are substantial. The City, working closely with its farming community, should explore various local, state, and federal options to sustain Middletown's farms and preserve the land as open space.

Habitat and Wildlife Corridors

The 1990 Plan of Development notes that developed land in 1965 totaled approximately 3,400 acres. By 2000, the total had risen to 12,000 acres. The rapid spread of development has resulted in the fragmentation of the major open space areas within Middletown. Development not only reduces the total acreage available for flora and fauna, but it can also isolate or make movement difficult for various species. Isolation may have many deleterious effects, including a lack of genetic diversity and a reduction in the size of the local animal population.

In order to allow development to continue while still providing territory for animals and plants, wildlife corridors should be encouraged. The Ninth U.S. Circuit Court Of Appeals (1990) has provided a reasonable definition of a corridor:

"...avenues along which wide-ranging animals can travel, plants can propagate, genetic interchange can occur, populations can move in response to environmental changes and natural disasters, and threatened species can be replenished from other areas."

Wildlife corridors frequently follow environmentally sensitive lands, such as streams, rivers, or woodlands, which provide benefits such as food, security, and homes to a wide assortment of plants and animals, in addition to movement. The areas recommended for future acquisitions in Figure 9.3 take into account the need to preserve corridors for wildlife habitat and mobility.

Ecosystems

Preserving open space is an important part of preserving local riverine, wetland, meadow, forest, and ridgetop ecosystems. Each of these identifiable systems supports a variety of flora and fauna. Riverine systems contain many plants that require significant amounts of water and animals, such as beavers, that depend on the aquatic areas for food and shelter. Ridgetops will have unique plant communities that enjoy the cooler air and less fertile soil than found in the low areas in the valleys. Meadows support a number of plant communities that require more sunlight than would be found in forests, for instance. Many bird species, however, need the safety and security that forests provide. These systems are also dependent on one another.

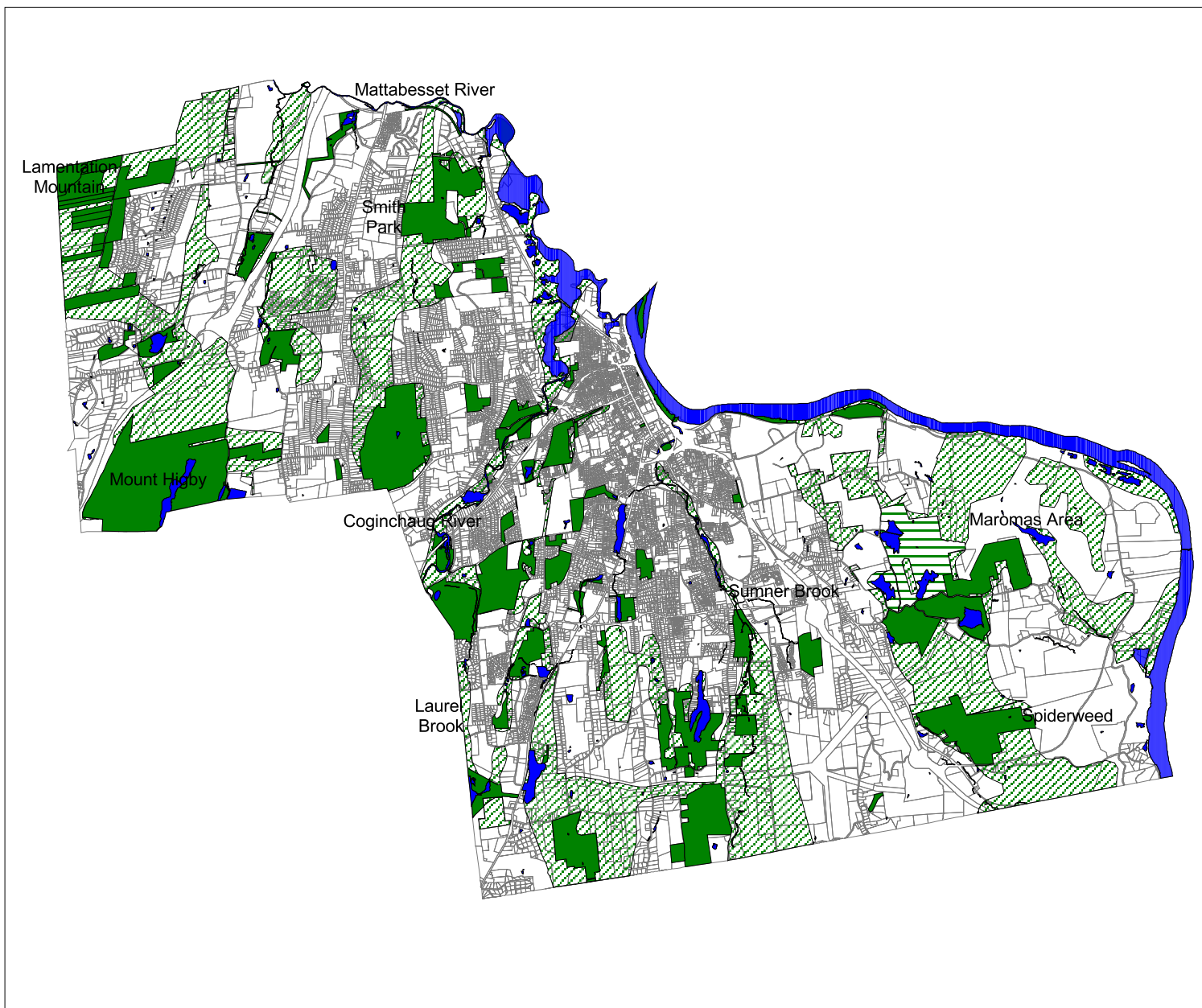
Vernal pools represent an example of a small ecosystem within a larger ecosystem. Vernal pools form in topographic depressions found in deciduous woodlands. These depressions are typically wet in the spring from rain and snow melting, but often dry up during the summer and fall. These areas provide extremely important breeding habitats for many amphibians including salamanders, the wood frog, and several invertebrates (i.e. fairy shrimps). The City's Inland Wetland and Watercourses Regulations protect vernal pools.

Open space lands offer more than just a refuge or home to many varieties of animals and plants; they also provide opportunities for the interaction between the various species. It is this interaction that makes open space important as an ecological area. Fragmentation of these areas have the effect of altering the interaction between various groups that existed prior to development. By preserving a

variety of environments (ridgetop, meadow, forest, and riverine), open spaces preserve areas for plants, animals, and people to interact together, providing social, cultural, and educational benefits.

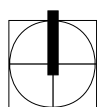
Although there has been significant progress in adding to the city's open space inventory over the past decade, figure 9.1 demonstrates that dedicated open space lands are still often "islands" lacking a network of preserved open space connections. In order to further the goal of connecting these open space areas, the new plan expands the areas recommended for future acquisitions, particularly in these areas:

- The Mount Higby - Highland Pond - Mount Lamentation - Sawmill Brook corridor along Middletown's western boundary contains steep slopes and forested wildlife habitat. Much of Highland Park and Mount Lamentation have already been protected. The Metacomet Trail runs through a portion of this area. Sawmill Brook and Richard's Brook wetland systems lie east of Lamentation Mountain and contain diverse wetland environments including wet meadows, swamps, marshes, and pond habitats. The diversity of flora and the extensive area make this a highly rated wetland ecosystem.
- Smith Park, Moody School, and the Camp property along Mile Lane Corridor provide active recreation and hiking trails. The area is a good example of a diverse corridor of forested and open uplands as well as an extensive and diverse wetland system. The old trolley right of way serves as a buffer for the Mattabasset River while offering passive recreational opportunities.
- The Coginchaug River passes through the central portion of Middletown. This highly urbanized river also passes through three parks in the city, providing a potential urban open space corridor, from the Wadsworth Falls State Park at the Middlefield town line to Harbor Park along the Connecticut River, offering opportunities for walking or hiking trails along the route.
- The Spiderweed – Connecticut Valley Hospital watershed corridor includes agricultural or forested lands that are known to contain rare species with high aesthetic value. A significant portion of the land in this corridor is owned by a CL&P holding company. These lands should be preserved.
- The Laurel and Hubbard Brook wetland systems represent outstanding wetland examples and serve as wildlife corridors in a largely undeveloped portion of the city.
- The Mattabasset River divides Middletown and Cromwell and has abundant wetlands and an important riverine corridor.
- Sumner Brook flows north from Durham. There is abundant wildlife in the southern section and the Brook flows through picturesque farmland. The corridor contains significant amounts of floodplains and wetlands.
- The Connecticut River wetlands and marshes along the riverbank are also environmentally significant regions.






MIDDLETOWN PLAN OF DEVELOPMENT Middletown, CT

Figure 9.3 2000 Open Space Map



0 5000 10000 15000 Feet

BFJ Buckhurst Fish & Jacquemart, Inc.

-  Existing Open Space
-  Institutional Open Space
-  Areas Recommended for Future Acquisitions

9.6 Funding for Open Space

Funding for open space acquisition and maintenance is identified on an as needed basis. The Middletown Park and Recreation Department maintains the land acquired by open space funds, yet neither the size of the Department or the Department's budget has grown with the open space acreage. While every effort should be made to continue to seek grant money to continue to acquire more open space land, other avenues of funding should be considered. It is essential that the Common Council recognize the importance and benefits of open space preservation and maintenance. Specific line items should be established in the city budget and funded annually for both open space matching funds and open space maintenance.

9.7 Summary

Undeveloped land endows Middletown with a rural character that residents identified in the 1999 questionnaire as one of the things they like best about Middletown (27%). Another 37% said they liked their neighborhood because of the rural character. It is important to turn these undeveloped lands into preserved open space parcels so that residents continue to find Middletown an appealing place in which to live. Fortunately, Middletown residents have backed their preferences with bond money to acquire land, and the state of Connecticut now has a number of programs in place to help local municipalities acquire open space lands.

Preserving all undeveloped lands in Middletown is not practical, however, nor is it necessarily desirable, as it would prevent the local community from growing. Open space lands, therefore, need to be planned for, with clear goals and guidelines prioritizing future open space acquisitions.

Major Assets

- The Connecticut River and its tributaries.
- Residential population that is active in supporting and preserving open space areas.
- The Maromas upland area.
- Farming community.
- Private and non-profit groups that are actively pursuing open space parcels.

Issues and Opportunities

- Future acquisitions should target land that enlarges existing open space areas, provides open space connections, preserves historic and important views, and farmland.
- Create open space linkages to allow for pedestrian and bicycle connections to and between open space areas. Connectivity is a critical component of this plan. Figure 7.5 proposes new paths as well as extensions of existing paths to provide a meaningful interrelated network. Hiking connections should also be available between open space parcels.
- Increase public access to the Connecticut River and its tributaries. Acquiring land along the riverfront can provide valuable open space with social, recreational, educational, and cultural benefits. The recent purchase of the Peterson Oil Co. parcel, noted earlier, is an integral step in creating a more accessible and visible riverfront. Wilcox Island, within the River, is another underutilized asset. Access and use of the island should be considered along with access to the Connecticut River.

- = Preserve existing undeveloped areas recommended for open space on the Open Space Plan. Approximately 50% of Middletown's land remains undeveloped. The city does not have the resources to acquire all the undeveloped land within its boundaries. Therefore, strategic acquisitions are necessary to preserve the rural character, ecology, farmland, and viewsheds that have value to residents. The Open Space Plan presents a coherent, carefully planned map that identifies those lands that should be set aside from development pressures.
- Continue to seek grant money for land acquisition efforts to increase inventory of preserved open space as discussed in Chapter 11, "Plan for Open Spaces," prepared as part of the previous Plan of Development.

In the past year Middletown was the recipient of almost \$600,000 in grant money that went towards the purchase of 115 acres. Middletown has been successful in past efforts at receiving outside grant money and every effort should be made on an annual basis to continue to seek additional support from outside sources that further the acquisition of land identified in the Open Space map. State and federal sources represent an additional funding source, besides local bond money, for the city to acquire open space.

- Consider other funding sources and acquisition of additional open space parcels through purchase, gifts, easements or other strategies. The City should add line items in the annual budget for open space acquisition and maintenance. Additionally, putting a portion of the open space land to use (for instance, renting fields to farmers) can generate an annual income stream. This separate funding can be applied to maintenance, education, research, or future acquisitions. Uses which are compatible with underlying open space principles should be considered.
- Education of public open space benefits
- Coordination of future open space provision with subdivision applications
- Working with all levels of government to meet goals